

1. Which of the following sentence concerning the characteristics of soils in the tropical areas of the world is **WRONG**? Soils that are found in tropical rain forests ...

- A ... have its typical red/yellowish colour due to the high concentration of iron- and aluminium oxides.
- B ... contain a low humus horizon due to the fast transformation and remineralization of all organic matter.
- C ... are deeply worn away compared to other soils due the frequent heavy precipitation.
- D ... have a high pH value due to the large amount of iron- and aluminium oxides.



2. This is the world's largest diamond mine by volume. In which country is it located?

- A Australia
- B Spain
- C Argentina
- D Thailand



3. This picture was taken around 100 km above the Saudi-Arabian desert. Which type of irrigation is typically forming this pattern?

- A Subsurface irrigation
- B Centre-pivot irrigation
- C Drip irrigation
- D Basin irrigation



4. This is a NASA satellite image of Mount Taranaki, a volcano in New Zealand. What could be the cause for the characteristic green circle around it?

- A religious meaning for the Maori population
- B hazard zone set by the government
- C fertile soils due the volcanic ground
- D protected forest reserve



5. These pictures were taken at different times over a period of about two years. The place is set on the Hungarian – Serbian border. What was being built in that area during that time?

- A initial reception centre for refugees
- B Amazon logistic centre
- C production plant for cell phone compartments
- D toll and customs station



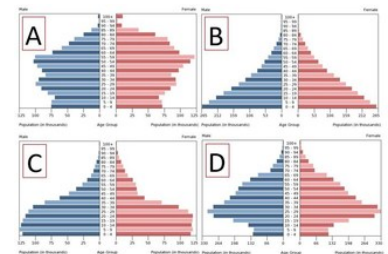
6. What actual problem is illustrated in this picture?

- A The impact of industrial waste on nature
- B Increasing shoe sizes in industrial countries
- C The human demand on nature to support people / economy
- D Infrastructural problems caused by overpopulation



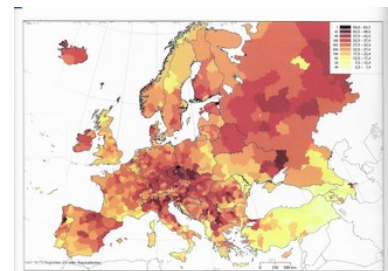
7. Which of these population pyramids belongs to Botswana? (They all belong to four different countries and are based on data for 2016.)

- A A
- B B
- C C
- D D



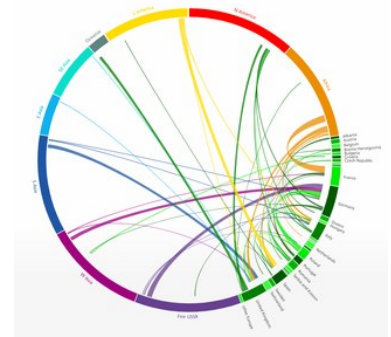
8. This map shows the percentage of people in European regions who work in a certain economic sector. Dark red indicates high values light yellow low values. What sector is illustrated by this map?

- A Primary sector
- B Secondary sector
- C Tertiary sector
- D Quaternary sector



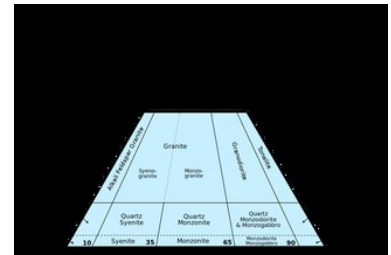
9. What does this circular plot visualisation show?

- (A) Economic relations between European countries and specific economic regions.
- (B) Origins and destinations of international migrants who head to European countries.
- (C) Government debts of European countries and to whom they're owed.
- (D) Origins and destinations of international refugees who head to European countries.



10. This simplified QAPF diagram is used to classify igneous rocks based on mineralogic composition. What's the name of an igneous rock that contains 58% Alkali feldspar (A), 28% Plagioclase (P) and 14% Quartz (Q)?

- (A) Quartz Syenite
- (B) Monzogranite
- (C) Granodiorite
- (D) Quartz Monzonite



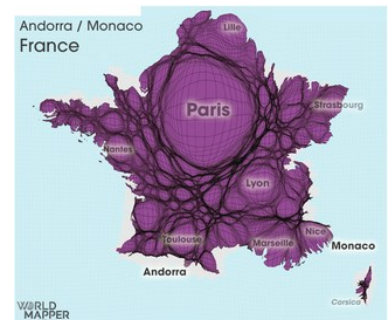
11. On what glacial structure was Raderach (Germany, located near the north shore of Lake Constance) built?

- (A) Drumlin
- (B) Medial moraine
- (C) Terminal moraine
- (D) Meltwater bank



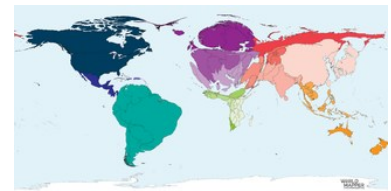
12. What does that map of France show?

- (A) Population growth
- (B) Number of letterbox companies
- (C) Number of commercial flight movements
- (D) Population density



13. This map shows the proportion of all electricity generated from ...

- A hydroelectric power.
- B nuclear power.
- C gas power.
- D coal power



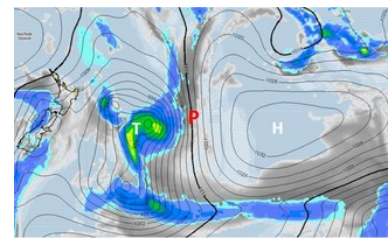
14. What kind of lava is shown in this picture?

- A Pillow lava
- B Pāhoehoe lava
- C Aʻā lava
- D Block lava



15. This picture shows air pressure in the southwest Pacific. What's the wind direction at Point P?

- A From North to South
- B From South to Nord
- C From West to East
- D From East to West



16. This is the eastern end of the Chinese Wall. In which sea is this part located?

- A Andaman Sea
- B Yellow Sea
- C South China Seas
- D Sea of Japan



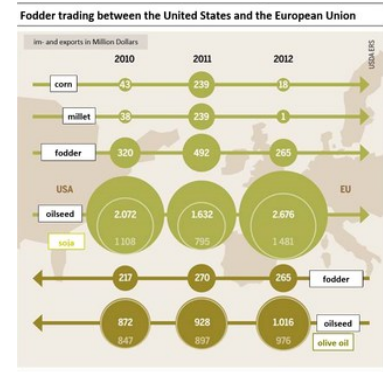
17. This is a picture of the Kumbha Mela, a Hindu pilgrimage that takes place in India and is periodically held on different rivers in India. On which river did Kumbha Mela never took place?

- A Yamuna
- B Ganges
- C Indus
- D Shipra



18. This infographic shows the fodder trading between the United States and the European Union (EU). Which category had the biggest relative increase of imports from 2010 to 2011

- A Olive oil
- B Corn
- C Millet
- D Soja



19. Which of the pictures above shows a characteristic sinkhole?

- A A
- B B
- C C
- D D



20. Where would a hypothetical tunnel end, if you dig from Cambodia, straight through the earth's center?

- A A
- B B
- C C
- D D



21. Which of the following statement about strato volcanoes is true?

- A The gases can escape easily
- B The magma is viscous
- C They are always found at constructive plate boundaries.
- D The magma is basic

22. What statement about air humidity is true?

- A In a cloud the relative humidity decreases with increasing altitude.
- B In a cloud the absolute humidity decreases with increasing altitude.
- C The dew point depends only on the saturation humidity.
- D Below the clouds the dew point decreases with increasing altitude.

23. One of these rocks is not sedimentary, which one?

- A Sandstone
- B Anthracite coal
- C Limestone
- D Gneiss

24. Which two areas in Switzerland have a slightly higher seismic hazard?

- A Geneva and Thurgau
- B Solothurn and Ticino
- C Basel und Valais
- D There are hardly any earthquakes in Switzerland

25. The Moho is...

- A The boundary between the lithosphere and asthenosphere.
- B The border between a basaltic layer and granitic layer.
- C characterized by an alteration of rock viscosity.
- D The boundary between the earth's crust and earth's mantle.

26. A river's headwaters are characterized by

- A Deep erosion
- B Low slope gradient
- C Meander
- D Low flow speed

27. Active shield or strato volcanoes...

- A Usually erupt effusively.
- B Deliver great quantities of lava of low viscosity.
- C Carry lava that is acid to intermediate with a high content of silica.
- D Are predominantly found at divergent plate boundaries.

28. The „Anglo-American city“...

- A Differs from European cities in mainly having skyscrapers.
- B Is a role model for European cities in terms of preservation of monuments and historic buildings.
- C Is usually a megacity.
- D like the European city has a high job density and a low residential density in the centre.

29. Agglomerations in Switzerland...

- A Have developed due to spatial planning.
- B Don't distinguish construction areas from agricultural areas.
- C Cannot be regulated ideally by spatial planning because the communities are self-governed.
- D Are not subject to the spatial planning policies.

30. Migration to rural areas is also called...

- A counterurbanisation.
- B Reurbanisation.
- C Urbanisation.
- D Suburbanisation.

31. Where is the sun directly overhead (zenith) at noon on the 9th of August...

- A slightly north of the equator.
- B Almost exactly on the tropic of cancer
- C At about 12° north
- D At ca 7.5° east

32. Which of these terms concerns weather and not climate?

- A Spring
- B Mean annual temperature
- C Tornado
- D The tropics

33. Ocean currents...

- A Depend only on salt concentration.
- B Depend on differences in water temperature.
- C Are strongest in the subtropical regions
- D Are strongest in cold climates

34. Why is it colder in polar regions than in Switzerland?

- A Because polar regions are farther from the sun.
- B Because of the ocean currents.
- C Because the inclination of sunrays is less steep.
- D Because the sun shines for a longer time per year.

35. The trade winds of both hemispheres...

- A Are located within the range of both tropics.
- B Originate from the tropical high pressure belt.
- C Are accountable for the extensive desert areas around the tropics.
- D Are distinguished by lofty cumulonimbi.

36. (At) the equator...

- A The sun stands at its zenith all year round.
- B Is the circle of latitude with the smallest perimeter.
- C The sun stands at its zenith on June 21st.
- D Day and night have always equal duration.

37. What is the formula to calculate the “natural population increase”?

- A birth rate plus net migration
- B birth rate minus mortality rate
- C mortality rate minus net migration
- D birth rate + mortality rate

38. Which factor does not necessarily influence population growth

- A Housing opportunities and housing costs.
- B Nutrition, access to medical services and hygiene.
- C Fertility and mortality.
- D Political incidents like war, eviction and migration.

39. What does the term “life expectancy at birth” exactly mean?

- A Living conditions, a new-born cannot expect.
- B Number of years, a new-born will presumably live.
- C Living conditions, a new-born can expect.
- D The age (in years), a new-born presumably won't reach.

40. A decreasing birth rate...

- A Is amongst others a socially conditioned result of a decreasing mortality rate.
- B Can currently only be found in Europe and North America.
- C Results from a decreasing fertility rate.
- D Means long-term reduction of the mean age of a population.